Spallation Neutron Source Procedure



Procedure Number: SNS-QA-P05

Date: 9 May 2000 Revision: 0

Title: Quality Assurance in Acquisitions

Copies: This document is available on the SNS web site. If you are working with a copy, you should periodically verify that it is the current revision number.

Purpose

To provide overall direction to ensure quality in the acquisition of items and services for the Spallation Neutron Source (SNS). This procedure relies on the graded approach from, and implements parts of several criteria in the SNS Quality Assurance Plan, SNS-QA-P01, including 3, Quality Improvement; 5, Work Processes; 6, Design; and 7, Procurement.

Scope

This procedure applies to items that will be incorporated into the SNS and to items or services used in development, design, and construction of the SNS. Acquisition, as used here, includes in-house fabrication at SNS or partner labs, as well as procurement from suppliers and subcontractors.

Applicability

This procedure provides requirements applicable to all project participants, encompassing all acquisition activities performed by or for the SNS Project, from research and development (R&D) through commissioning. Where needed, additional acquisition procedures may be developed by the architect-engineer/construction manager (AE/CM) and the partner laboratories to govern work in their areas of responsibility. Each partner laboratory shall work within its own QA procedure system, which must comply with the requirements in this procedure unless a deviation is approved by the SNS QA Manager. The AE/CM will use procedures that implement its QA program as defined in its contract with the SNS Project Office.

Responsibilities

SNS Division or WBS element management or task leader

- identifies the need for an acquisition in the Advanced Procurement Plan, an approved Work Package, approved Project Change Request, or other special circumstance, and
- assigns a team member to prepare for the acquisition of the item or service, including coordination of technical, quality, ES&H and other considerations, and selection of an internal vs. external acquisition path. Requester, requisitioner, engineer, and technical contact are terms used in the laboratories for the team member performing this role. *Responsible team member* will be used here to denote the person with primary technical responsibility for the acquisition, regardless of their location in the organization chart.

Responsible team member

- determines the requirements for the item or service and identifies potential suppliers, assisted by purchasing, laboratory internal suppliers, and quality assurance (QA) personnel as needed.
- ensures that the contract, purchase order, or specification requires suppliers to provide electronic records acceptable to the SNS Document Control Center, perform inspections to avoid counterfeit parts,
 - request deviations from the specifications where advisable,
 - request approval of nonconforming items if proposed to use as-is, or to repair to less than original specification, and allow SNS representatives access to facilities and records for surveillance.
- jointly with the QA representative (QAR)
 - selects the method to ensure that the supplier is prepared to provide adequate quality, ¹
 - devises an acceptance strategy,
 - verifies the performance of the contract or order, including
 - reviewing and determining the proper disposition of supplier deviation requests and nonconformance reports.

The QA representative

- ensures that the supplier is prepared to provide adequate QA for the item or service,
- performs supplier surveillance as needed after award of a subcontract,
- keeps a record of supplier performance for future procurement consideration, and

Spallation Neutron Source Procedure



• partners with the responsible team member to perform the joint tasks listed above.

The procurement representative (buyer)

- ensures that the DOE and other government procurement laws and regulations, as well as SNS and affected partner laboratory procurement rules are followed,
- ensures that the procurement documents contain the QA requirements identified by the responsible team member and OAR.
- partners with the responsible team member to identify potential suppliers, using requests for proposals (RFPs) and other available procurement mechanisms,
- establishes contracts or places orders with the selected supplier(s),
- serves as the primary communications point between all SNS personnel and the supplier while administering the contract.

The laboratory internal supplier (shop manager or equal)

- assists the team member with information on the in-house capability, including estimating and planning information,
- ensures that the SNS work order requirements are satisfied, including QA requirements,
- ensures that applicable partner laboratory procedures are followed, including ES&H procedures.

¹Note: Suppliers of quality level 1 or 2 items or services should be evaluated to determine their ability to provide acceptable items and services. QA representative approval is mandatory for level 1 procurements; consultation is required for level 2 procurements.

Process Flow

Follow the process shown in Appendix A.

Records

- Information gathered to describe the supplier's quality system (questionnaire, survey, QA plan, or notes from informal checks)
- Evaluation results
- Acceptance strategy (ACL or other documentation)
- Approved technical documents for the acquisition
- Records of verifications, including source surveillance, receipt inspections, etc.
- Deviation requests and dispositions
- Nonconformance reports and dispositions

References

SNS-QA-P01, SNS Quality Assurance Plan

SNS-QA-P04, Specifications for Equipment and Similar Items

SNS-QA-P03, Procedure for Acceptance Criteria Listings

Spallation Neutron Source Procurement Supplement to ORNL Procurement Operating Practices

Appendixes

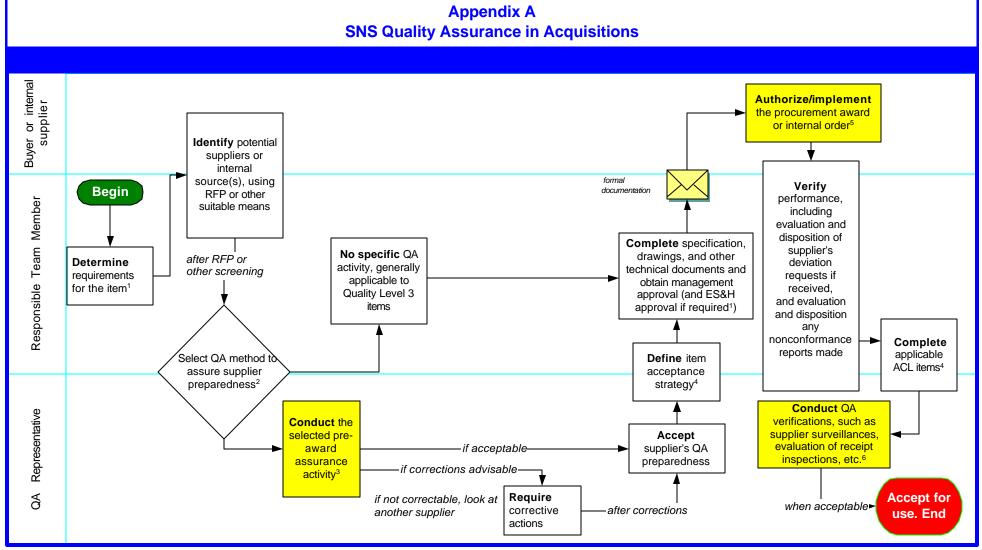
A: SNS Quality Assurance in Acquisitions

B. Clauses for Specifications

APPROVED BY: M. H. Skonicki

__(original filed in SNS DCC)

SNS Quality Assurance Manager



Requirements include:

- functions, features, and performance
- interfaces: mechanical, electrical, software, operator, etc.
- quality, beginning with the Quality Grade Level (Tables 1 and 2 of SNS-QA-P01)
- ES&H (ES&H approval of specifications and related procurement documents may be needed)
- delivery schedule, installation, life cycle cost, standardization across multiple WBS elements, etc.

²QA Methods (assurance activities) to assure supplier preparedness :

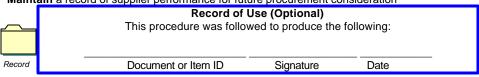
- Quality System Survey
- QA Plan review
- QA questionnaire
- Informal check of literature, web pages, telephone call, rely on past experience, etc.

³Multiple potential sources may be checked through the quality assurance activity prior to selection of the final source

⁴Acceptance Criteria Listings are a means to document the acceptance strategy. See SNS-QA-P03. An ACL might include such things as certification, source surveillance. acceptance testing, and receipt inspection

⁵Internal Suppliers have a duty to ensure fulfillment of the order, including quality requirements, while complying with partner lab procedures, ES&H, and QA requirements

⁶**Maintain** a record of supplier performance for future procurement consideration Record of Use (Optional)



Spallation Neutron Source Procedure



Appendix B Clauses for Specifications

The following paragraphs (clauses) are recommended for inclusion in specifications or similar procurement documents, where the team member and/or QA representative determine they are applicable. In these clauses, SNS or the procuring partner laboratory is referred to as "the Company," in keeping with procurement custom.

Access for Source Surveillance Inspections

As part of the Company's quality assurance program, source surveillance activities may be conducted at the Seller's facility or any subtier seller facility that the Company determines necessary to ensure that quality objectives are met. Such surveillance may include auditing and monitoring of production processes, in-process inspection and controls, chemical or physical certifications, final inspection and tests, preparation for shipment, and review of certification data. The Seller shall provide the Company representatives access to all data and operating areas pertinent to the contract. Source surveillance by the Company representative shall not constitute product acceptance by the Company and shall in no way relieve the Seller of the responsibility to furnish acceptable items.

Supplier-Requested Deviations

The Offeror may propose deviations from the specifications, drawings, or other technical requirements of this procurement. Where time is a consideration, the Offeror may communicate the proposed deviation directly to the engineer or technical lead, with a copy to the Company's buyer. The engineer or technical lead will evaluate the technical aspects and recommend to the buyer, who will communicate acceptance or disapproval to the Offeror. The request should identify the affected items, drawing/specification number & revision number, a description of the proposed deviation, and the justification for it.

Nonconformances

The Company expects to receive equipment items, components, materials, software, and documentation that conform to all codes, standards, specifications, and procedures in the Agreement. The Seller may use its own nonconformance program to identify, report, and recommend disposition of all nonconformances, but dispositions that would leave any remaining nonconformity must be submitted to the Company for approval. The request should identify the affected item(s) by name and serial number, citing the drawing/specification number & revision number containing the specific requirement that has not been met. It should state the number of nonconforming items being reported. The request should include a description of the nonconformity, identifying requirement(s) not met. The supplier may attach a description of the cause, and a corrective actions plan and schedule if pertinent.

Note: The issuance and acceptance of such a request in no way limits or affects the warranty provision of the Agreement. Such a request shall not establish a precedent or obligation to accept existing or future items not conforming to all provisions of the Agreement.

Electronic Documents

Wherever feasible, all documentation shall be submitted in an electronic format acceptable to the SNS Document Control Center, in addition to any other formats. Adobe Portable Document Format (PDF) has been listed as an acceptable format for all documents, including drawings, that would normally be printed on paper. If the electronic document is not contained in one complete electronic file, instructions for reassembling the document must be provided. For additional information on acceptable formatting, see the SNS DCC web page (http://www.sns.gov/sns_home.htm).